



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/546,002	08/18/2005	Masaya Naoi	276756US2PCT	8654
22850 7590 08/28/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ABRAMS, NEIL	
			ART UNIT 2839	PAPER NUMBER
			NOTIFICATION DATE 08/28/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

Application No.

10/546,002

Applicant(s)

NAOI

Examiner

Neil Abrams

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

Title, words 12-13 should be deleted. Drawings objected to, in fig such as fig 4, T1, T2 should be added.

1. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 4, lines 1-3 are unclear and how they read on disclosed device is not understood.
3. Kokubo patent, note effective date 8-22-2002 as published document.
4. Claims 1-14 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kokubo.
5. Kokubo (coassigned with this application) is seen to admittedly disclose all claims 1-14 limitations, see figures 4, 11-13 except the "T2/T11 is at least 0.9" feature.
6. As first basis of rejection Kokubo is seen to anticipated the claims under 35 USC 102 since in figure 4, as shown in functional part 20 conductive parts at leadline 22 are adjacent to "same thickness" insulative parts at leadline 24, therefore the insulative part could be said to have a "thickness equal to that of the conductive part" hence to meet the "T2/T1/ 0.9" limitation. As applied above the insulative part is read as having two thickness, one at 23 and one at leadline 24 the latter being adequate for claim language.
7. Dependent claims feature also met by Kokubo. As examples for claims 6, 8, note Kokubo, fig 13, pcb 30 and insulating sheet 40. For claim 4, lines 4-7, note wafer 6 to

be tested; wafer dimensions since not part of connector cannot be relied upon for patentability.

8. As alternative for all claims, should any feature become at issue such as claim 4, S1/S2 ratio or claim 5, coefficient, these may be deemed obvious variations of Kokubo under 35 USC 103.

9. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubo in view of Naoi'422.

10. Kokubo shows claims 1-14 recited features, see figures 4, 11-13 but for this rejection, is assumed to lack the claims 1, 2, T2/T1 ratio. Kokubo prior art figure 20 and Naoi figure 2 at 8 show connector film that include such ratio. Obvious to use that type film in Kokubo figure 13 device to simplify the film molding process. While above seems adequate for claims 1-14 should other matters become at issue they are deemed obvious variations of Kokubo, as modified above.

11. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi'442.


12. For claims 1-5, Naoi figure 3 shows a connector device 30 with conductive film to be formed at holes 31, the film as shown in figure 2 meeting the T2/T1 ratio of claims 1, 2. Other features recited in claims 1-5 seem to be met by such connector or to be obvious variations that do not appear at issue. For claims 6-14, main or only issue in this case is seen to be the T2/T1 ratio and if this is agreed to, claims 6-14 should stand or fall with claim 1.

13. Claims 6-14 and 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi'442 in view of Nakano and Burdelaise.

14. For claim 6, Naoi, figure 9 includes probe device with frame 40 and film 42, figure 8, that appear to meet  $T2/T1$ , 0.9 limitations. In addition, figure 2 film 8 clearly meet such limitation and is for use in figure 9 probe system. Figure 9 only uses one film. Use of probe with plural test sheets 504 to test wafer is taught by Nakano, figure 20. It would have been obvious to form Naoi device as such a plural test device with frame 40 having plural holes for plural films to enable larger scale testing as in Nakano. Claims 7-14 seen to relate to admittedly known features. In addition, for claim 8, obvious to use an insulating sheet in view of Burdelaise at 96 to adapt the tester contact spacing to that of the device or wafer tested. Claims 1-5 are includes in case issues arise as to paragraph 11 rejection using Naoi alone. Also note for both Naoi rejections that while use of plural films is discussed it appears that the primary inventive concept in this case is asserted to be the  $T2/T1$  ratio and of this is true whether one or plural films is taught in references should not be at issue.

15. Applicant in response is asked to point out claims that are not at issue, stand or fall with decision a to claims 1,2.

Any inquiry concerning this communication should be directed to Neil Abrams at telephone number 571-272-2089

  
NEIL ABRAMS  
PRIMARY EXAMINER